Shoot Off Simulation Flowchart

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Purpose: Shoot off Simulation

System Libraries
I/O objects
c standard Library
c time Library
c Math Library
I/O Manipulation Library
Standard Namespace

User Libraries
None

Global Constants
MAXRAND

Function Prototypes
pUnifrm
pKill

main

set random number seed

Declare Variables
aSkill,bSkill,cSkill
aLive,bLive,cLive
nTrials,aCnt,bCnt,cCnt

Initialize Variables

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```
        ┌──────────┐
        │  Page 2  │
        └────┬─────┘
             │
             ▼
   ┌──────────────────┐
   │ set counter      │
   │ variable to 1    │
   └────────┬─────────┘
            │
            ▼
        Counter variable
        less than or equal to   ──True──▶  Set to players to be alive
        number of games
            │
          False
            ▼
   Display total amount of
   games and winning
   percentages for each player
            │
            ▼
       exit main/program
```

More than one player alive ──False──▶ increment winners count by 1 and increment counter

More than one player alive ──True──▶

player one is alive ──True──▶ **player two is alive** ──True──▶ call pKill to try and shoot player two

player two is alive ──False──▶ **player three is alive** ──True──▶ call pKill to try and shoot player three

player one is alive ──False──▶ **player three is alive** ──False──▶

player two is alive ──True──▶ **player three is alive** ──True──▶ call pKill to try and shoot player three

player three is alive ──False──▶ **player one is alive** ──True──▶ call pKill to try and shoot player one

player two is alive ──False──▶

player three is alive ──True──▶ **player two is alive** ──True──▶ call pKill to try and shoot player two

player two is alive ──False──▶ **player one is alive** ──True──▶ call pKill to try and shoot player one

player three is alive ──False──▶

player one is alive ──False──▶

pKill Function

pKill funtction takes
in
player skill

call pUnfrm

number returned
by pUnfrm
is less than or equal to
player
skill level

True → return true

False → return false

pUnifrm Function

no parameters

returns rand number
divided by MAXRAND
global constant